

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App. No. : 10/708,124 Confirmation No. 2123  
Applicant : Susumu Noda, et al.  
Filed : February 9, 2004  
T.C./A.U. : 2883  
Examiner : Jerry M. Blevins  
Docket No. : 39.038  
Customer No. : 29453

Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### **REPLY Under 37 C.F.R. § 1.111 and Pursuant to 37 C.F.R. § 1.121**

Sir:

In response to the Office action of February 21, 2006 reconsideration of the above-identified patent application is respectfully requested. (This reply is being filed on May 22, 2006, the first business day following the Sunday, May 21, 2006 date that is one calendar month from the mailing date of the Office action, and is therefore timely filed.)

### **AMENDMENT Pursuant to 37 C.F.R. § 1.121**

**An amendment to the Specification** is on page 2 of this paper.

**A listing of the claims** begins on page 3 of this paper.

**Remarks** begin on page 6 of this paper.

**Amendments to the Specification (other than claims):**

Please replace paragraph [0041] with the following amended paragraph:

[0041] The Q factor and electric field pattern (radiation pattern) for a cavity made from a donor-type point defect 4 as is illustrated in Fig. 1 were simulated by the FDTD method. The simulation parameters were configured by selecting silicon for the slab 1; and setting approximately  $[[1.55 \mu\text{m}]]$  1.55  $\mu\text{m}$ , which is generally used in optical communications, for the wavelength  $\lambda$ ;  $[[0.42 \mu\text{m}]]$  0.42  $\mu\text{m}$  for the lattice constant  $a$ ;  $0.6a$  for the slab 1 thickness; and  $0.29a$  for the predetermined sectional radius of the through-holes 2.